Amphenol Aerospace

HIGH VOLTAGE 38999

FOR NEXT GENERATION AIRCRAFT POWER NEEDS

PDS - 311

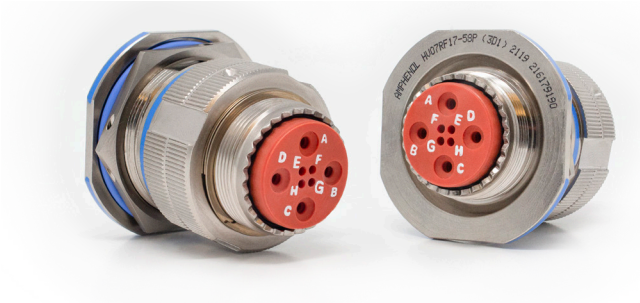
High Voltage 38999 (HV38999) is an expansion of MIL-DTL-38999 developed to provide solutions for next generation aircraft power requirements.

Future power distribution architecture is moving toward higher voltages beyond the capabilities of standard connectors. Through insert optimizations these specialty D38999s can safely carry high voltages and large currents at altitude while remaining partial discharge free to extend connector life.

FEATURES & BENEFITS:

- Designed to meet MIL-DTL-38999 mechanical and environmental performance
- Available safety interlock circuitry utilizes last mate, first break sequence
- All MIL-DTL-38999 shell configurations/finishes available including our Dualok high vibration plug
- Utilizes existing AS39029 type silver plated power contacts including the higher current Temper Grip as well as busbar and threaded termination styles.
- Accommodates standard MIL-DTL-38999 accessories

Test Voltages				
ALTITUDE	DWV Test Voltages A/C (RMS)		PDIV Test Voltages A/C (RMS)	PDIV Test Voltage D/C
	Unmated	Mated		
SEA LEVEL	2600V	4500V	1550V	2000V
20,000 FT	N/A	3850V	1250V	1700V
30,000 FT		3700V	1100V	1400V
50,000 FT		3000V	850V	1150V



Standard Contacts	
Size	Amps
16	13
12	23
8	46
4	80
0	150

High Performance Temper Grip Contacts	
Size	Amps
-	-
-	-
8	65
4	110
0	220

RADSOK Contacts	
Size	Amps
-	-
-	-
8	70
4	120
0	250

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HV38999 HOW TO ORDER

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1. Connector Type	2. Shell Style	3. Service Class	4. Shell Size - Insert Arrangement	5. Contact Style	6. Contact Type	7. Alternate Position	8. Modifications
HV	06	RF	13-54		P	A	(3D1)

1. Connector Type

HV	High Voltage 38999
HVC	High Voltage Composite 38999

4. Shell Size - Insert Arrangement

Shell Size & Insert Arrangements see below.

5. Contact Style**

OMIT	Crimp /Less Contacts
F	Female Thread Termination
M	Male Thread Termination
B	Busbar

7. Alternate Position

A, B, C, D, E
Omit for normal rotation parts.

8. Modifications**

P3D = 3D Printed, recommended for fit checks and benchtop testing

(3D1)	P3D Metal Clip Insert, Standard Shell
(TPS)	Touch Proof Tips (Pin contacts only)

2. Shell Style**

00	Wall Mount Receptacle
01	Inline Receptacle
02	Box Mount Receptacle
06	Straight Plug
56	DUALOK Plug
96	Plug with Integral Backshell
07	Jam Nut Receptacle
97	Reduced Flange Jam Nut Receptacle

6. Contact Type

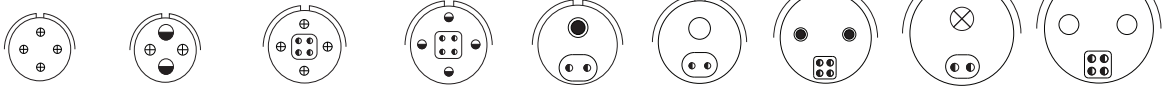
Add "G" before contact type designation for gold plated contacts

P	Pin Contacts
S	Socket Contacts
A	Pin, Less Contacts
B	Socket, Less Contacts
H	High Performance Temper Grip Socket
R	RADSOK Socket

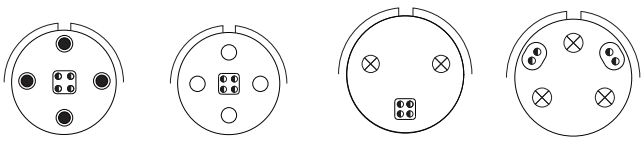
3. 175°C Service Class

RW	Corrosion resistant olive drab cadmium plated aluminum or composite, 500 hour extended salt spray (Composite - 2000 hour dynamic salt spray)	
DT	Durmalon plated, alternative to cadmium. Corrosion resistant, 500 hour extended salt spray	RoHS
DZ	Black Zinc-Nickel alternative to cadmium. 500 hour salt spray, conductive	RoHS
RF	Electroless nickel plated aluminum or Composite, 48 hour salt spray (Composite - 2000 hour dynamic salt spray)	RoHS
RK	Corrosion resistant stainless steel, firewall, 500 hour salt spray	RoHS
RKN	Corrosion resistant stainless steel, non-firewall, 500 hour salt spray	RoHS
RL	Nickel plated, corrosion resistant steel, non-firewall, 500 hour salt spray	RoHS
RS	Nickel plated, corrosion resistant steel, firewall, 500 hour salt spray	RoHS
DS	AP-93 Tri-Nickel Alloy Plated Aluminum, 1000 hour dynamic salt spray	RoHS

**Contact factory for additional configurations/customization



Shell Size & Insert Arrg.:	13-54		15-54		15-58		17-58		17-59		19-59		21-56		23-59		25-56	
Number of Contacts	4	0	2	2	4	4	4	4	1	2	1	2	2	4	1	2	2	4
Contact Size	16	22D	16	12	16	22D	12	22D	8	22D	4	22D	8	22D	0	22D	4	22D



Shell Size & Insert Arrg.:	25-58		33-58		37-56		37-57	
Number of Contacts	4	4	4	4	2	4	3	4
Contact Size	8	22D	4	22D	0	22D	0	22D

CONTACT LEGEND 0 4 8 12 16 22D

Some insert arrangements may have extended initial lead time depending on tool status. Please consult factory for more information.

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